Application Number 09/854,810
Responsive to Office Action mailed January 24, 2006

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1-4 (Cancelled).

Claim 5 (Previously Presented): A method for processing a network packet comprising:

receiving inbound packets from a network;

setting a rate-limiting operating mode based on a traffic level of the inbound packets; and

selectively invoking a packet service routine based on the rate-limiting operating mode by:

calling the packet service routine from a software process without issuing an interrupt when the traffic level of the inbound packets exceeds a threshold and controlling a usage rate by which the software process uses computing resources to process the packets, and

issuing a software interrupt to invoke the packet service routing as an interrupt-driven service routine when the traffic level of the inbound packets does not exceed the threshold.

Claim 6 (Original): The method of claim 5, wherein controlling the usage rate comprises determining an execution period that the software process has executed without a context switch.

Claim 7 (Original): The method of claim 6, wherein controlling the usage rate comprises pausing execution of the software process for a sleep period when the execution period exceeds a threshold.

Claim 8 (Previously Presented): The method of claim 7, wherein pausing execution of the software process comprises dynamically adjusting the sleep period during a network attack.

Claim 9 (Original): The method of claim 5, wherein processing the packets comprises invoking a packet service routine from the software process.

Claim 10 (Cancelled).

Claim 11 (Previously Presented): The method of claim 5, wherein invoking the packet service routine comprises selecting a pointer to the packet service routine from a table of pointers to invoke packet service routines supporting a number of network protocols in response to an interrupt.

Claim 12 (Original): The method of claim 5, further comprising detecting a presence of a network attack.

Claim 13 (Original): The method of claim 12, wherein detecting the presence of the network attack comprises detecting the network attack based on a traffic level of inbound packets.

Claim 14 (Original): The method of claim 12, wherein detecting the presence of a network attack comprises detecting a denial of service (DOS) attack.

Claim 15-18 (Cancelled).

Claim 19 (Previously Presented): A computer-readable medium comprising instructions for causing a programmable processor to:

receive inbound packets from a network;

set a rate-limiting operating mode based on a traffic level of the inbound packets;

selectively invoke a packet service routine based on the rate-limiting operating mode by:

calling the packet service routine from a software process without issuing an interrupt when the traffic level of the inbound packets exceeds a threshold and controlling a usage rate by which the software process uses computing resources to process packets, and

issuing a software interrupt to invoke the packet service routing as an interrupt-driven service routine when the traffic level of the inbound packets does not exceed the threshold.

Claim 20-21 (Cancelled).

Claim 22 (Previously Presented): The computer-readable medium of claim 19, wherein the instructions cause the processor to select a pointer to the packet service routine from a table of pointers to invoke packet service routines supporting a number of network protocols in response to an interrupt.

Claim 23 (Original): The computer-readable medium of claim 19, wherein the instructions cause the processor to detect a presence of a network attack.

Claim 24 (Original): The computer-readable medium of claim 23, wherein the instructions cause the processor to detect the network attack based on a traffic level of inbound packets.

Claim 25 (Original): The computer-readable medium of claim 23, wherein the instructions cause the processor to detect a denial of service (DOS) attack.

Claim 26-35 (Cancelled).